13

accordance with the teachings of the present invention. It will be understood that certain combinations and subcombinations are of utility and may be employed without reference to other features and subcombinations. This is contemplated by and is within the scope of 5 the present invention.

As many possible embodiments may be made of this invention without departing from the spirit or scope thereof, it is to be understood that all matters hereinabove set forth are shown in the accompanying drawings are to be interpreted as illustrative and not in a limiting sense.

What is claimed is:

- 1. An orthodontic appliance assembly for attachment to the tooth structure of a patient, said orthodontic appliance assembly comprising:
  - a fully cured pre-formed thin veneer body of plastic material, said veneer body defining a concave interior surface that is shaped to conform to a portion of the exterior surface area of at least one of the patients teeth and defining an exterior surface that conforms to the natural configuration of the teeth of the patient; and
  - an orthodontic appliance, said appliance having a base portion and an active portion, said base portion being formed to define plastic interlocking means, said base portion being molded within said thin veneer body and said plastic material being interconnected with said base portion and firmly supporting said base portion, said active portion of said appliance protruding from said veneer body and having an orthodontic connector portion formed thereon, said connector portion being of generally T-shaped crosssection defining an arch wire slot and defining opposed wire retaining flanges for receiving ligature wires, said connector portion of said orthodontic appliance being spaced from the exterior surface of said thin veneer body.
- 2. An orthodontic appliance assembly as recited in 40 claim 1, wherein:
  - said thin veneer body has knife-like edges formed about at least a portion thereof, said knifelike edges being disposed for contact with the exterior surface of the patients tooth and cooperating with 45 said exterior surface of the patients tooth to define a smooth marginal joint between said thin veneer body and said exterior surface of said tooth.
- 3. An orthodontic appliance assembly as recited in claim 1, wherein:
  - said thin veneer body is flexible and conforms readily to the contour of the patients tooth for which it is formed; and
  - said thin veneer body has knife-like edges formed about at least a portion of the peripheral portion 55 thereof, said knife-like edges being disposed for contact with the exterior surface of the patients tooth and cooperating with said exterior surface of the patients tooth to define a smooth marginal joint between said thin veneer body and said exterior 60 surface of said tooth.
- 4. An orthodontic appliance assembly as recited in claim 1, wherein:
  - said thin veneer body is of sufficient size, relative to the size of the tooth of the patient for which the 65 veneer body is intended, to cover substantially all of the labial surface area of the tooth of said patient.

14

- 5. An orthodontic appliance assembly as recited in claim 1, wherein:
- said thin veneer body is of smaller size than the size of the labial surface of the tooth of said patient.
- 6. An orthodontic appliance assembly as recited in claim 1, wherein:
  - said veneer body is preformed of fully cured material before application thereof to the exterior surface of the tooth of said patient;
  - said thin veneer body is flexible and conforms readily to the contour of the patients tooth to which it is to be applied; and
  - said thin veneer body has knife-like edge formed about at least a portion of the peripheral portion thereof said knife-like edges being disposed for contact with the exterior surface of the patients tooth and cooperating with said exterior surface of the patients tooth to define a smooth marginal joint between said thin veneer body and said exterior surface of said tooth.
- 7. An orthodontic appliance assembly as recited in claim 1, wherein:
  - said base portion of said orthodontic appliance has rounded edges formed thereon that function in conjunction with the material from which said thin veneer body is formed to prevent the formation of excessively stressed areas in said material as forces are applied to said orthodontic appliance.
- 8. An orthodontic appliance assembly as recited in claim 1, wherein:
  - said base portion of said orthodontic appliance is of generally rectangular configuration;
  - said active portion of said orthodontic appliance is of a configuration that cooperates with other orthodontic appliance structure utilized for imparting moving to the patients teeth relative to the bond structure of the patient; and
  - connecting means of smaller dimension than the dimension of said base portion and said active portion between said base portion and said active portion of said orthodontic appliance, said connection means being partially molded within said veneer body.
- 9. In combination with the tooth structure of an orthodontic patient:
  - a thin veneer body of fully cured stain resistant plastic material, said veneer body defining a concave interior surface that is shaped to conform to a portion of the exterior surface area of at least one of the teeth of said patient and defining an exterior surface that conforms to the natural configuration of the labial surface of said one of the teeth of said patient;
  - an orthodontic appliance having a base portion and an active portion, said base portion being formed to define plastic interlocking means, said base portion said active portion protruding from said veneer body, said orthodontic appliance having a connecting portion of smaller dimension than the dimension of said active portion and said base portion and being at least partially molded within said thin veneer body and having an orthodontic connector portion formed thereon, said connector portion being of generally T-shaped cross-section defining an arch wire slot and defining opposed wire retaining flanges for receiving ligature wires, said connector portion of said orthodontic appli-